VISITREND™ +VISIPLOT™
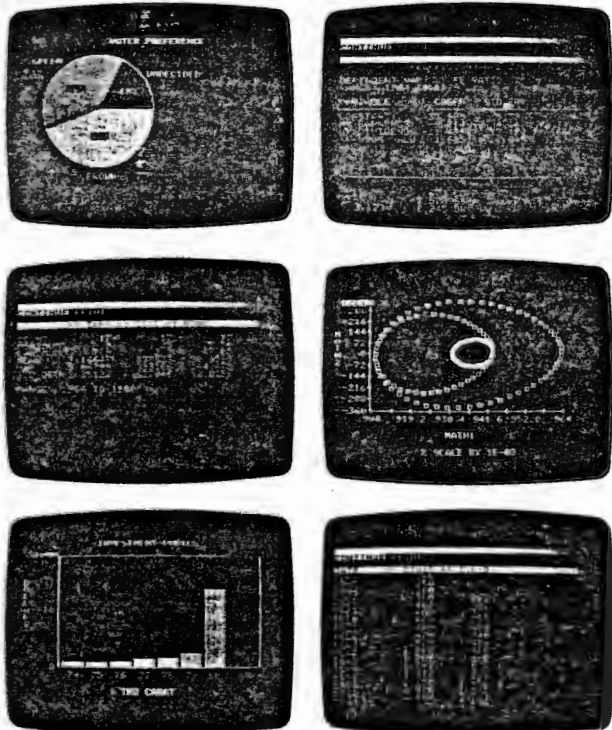## POCKET REFERENCE

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MOVING THE CURSOR

| ← →	Moves the cursor left and right within the menus and up and down within the lists.
SPACE Bar	Switches lines within the menus.

KEY USAGE

| CTRL-C	Cancels a function, such as printing or drawing a chart, that is already in operation.
ESC	Erases the last character entered from the keyboard. In the EDIT function, enters the Edit command menu. Erases the status area when a chart is displayed.
I,J,K, and M	Moves a moveable title in the direction indicated by the relative position of the key—up (I), down (M), right (K), and left (J).
REPT	Automatically repeats any other key that is depressed.
RESET	SHOULD NOT BE USED. When accidentally pressed, usually returns to the highest level menu in the current program.
RETURN	Selects the menu or list item to which the cursor currently points and enters alphanumeric data typed at the keyboard.
SPACE Bar	Marks a list item with an asterisk (*) for selection when multiple selection is allowed. Also deselects a selected item. Functions the same as the RETURN key when multiple selection is not allowed.
Y	Affirmative response to prompts requesting confirmation, such as changing programs and deleting files. Any key except Y cancels the operation.
0-9	Controls the speed of a moveable title—stop (0) to slow (1) to fast (9).

DATA ENTRY

Data is entered from the keyboard when the message in the status area requests it. Numeric data must be entered in decimal format. The program converts large numbers (greater than 9 digits) and small numbers (less than .001) to exponential format, for example, if you enter 34000000000 the program displays 3.4E+10.
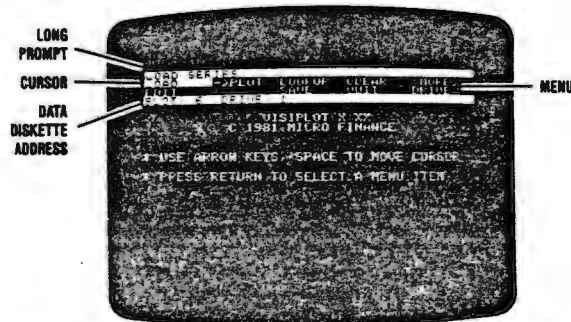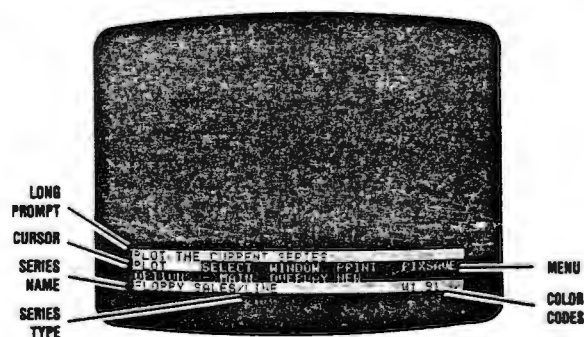
THE VISIPLOT CHART
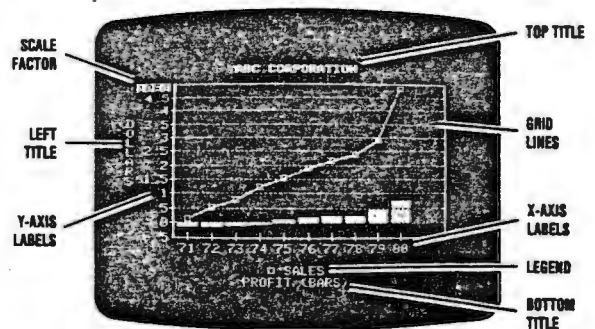
VISITREND PROGRAM STATUS AREA
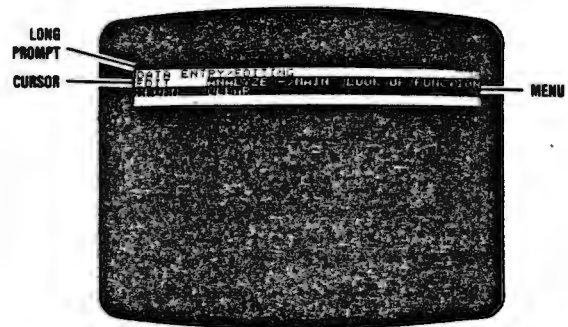
STORAGE MANAGEMENT PROGRAM STATUS AREA

PLOT PROGRAM STATUS AREA

SOME VISITREND/VISIPLOT DEFINITIONS

DATA POINT A numeric value associated with a date; the value plotted against the X-axis.

FILE A collection of 1 to 16 data series on a diskette.

LIST A display offering a collection of data items, one or more of which can be selected.

PERIOD The frequency of data points within a year.

RANGE The period of time covered by a series. It is plotted on the X-axis.

SCALE The scope of values covered by the Y-axis of a chart.

FILE NAME QUALIFIERS

The VisiTrend/VisiPlot program generates data series based on source series specified during function invocation. The generated series use the name of the source with one of the following qualifiers added.

FUNCTION	QUALIFIER	
MOVE AVG	.Mn	n = number of periods averaged.
SMOOTH	.S	
%CHANGE	.%	
LAG	.−n	n = number of periods lagged.
LEAD	.+n	n = number of periods leading.
TOTAL	.T	
REGRESS	.Fn	Fitted series; n is program supplied.
	.Rn	Residual series; n is program supplied

MENU FUNCTIONS
STORAGE MANAGEMENT PROGRAM
Main Storage Management Menu
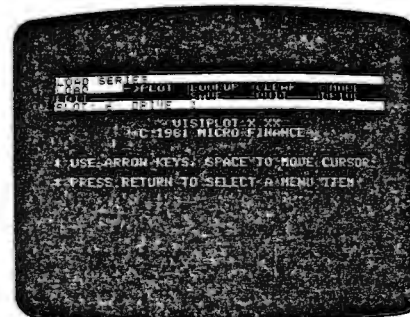

LOAD Load file of series from diskette to memory.

−>PLOT Go to the Plot program.

LOOKUP List data series currently in memory.

CLEAR	Delete data series from memory.	INSERT	Add 1 or more data points to the series.
<MORE>	Go to the main menu extension.	DELETE	Delete data points from the series.
EDIT	Invoke the data entry and editing function.	SPECS	Change the data series specifications.

CLEAR — Delete data series from memory.

<MORE> — Go to the main menu extension.

EDIT — Invoke the data entry and editing function.

->TREND — Go to the VisiTrend program.

SAVE — Write data series to file on diskette.

    NORMAL — Save data in Visiplot data format.

    DIF — Save data in DIF format.

QUIT — Transfer control to Applesoft Basic.

DRIVE — Change data diskette drive number.

INIT — Initialize a diskette for VisiPlot use.

DELETE — Delete files from the data diskette permanently.

SLOT — Change the data diskette slot number.

MAIN — Return to the main menu.

Edit Command Menu
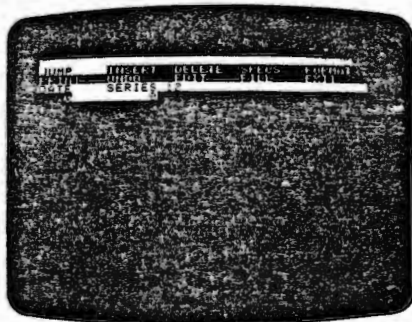
To change an entry, move cursor to entry, type new value, and press RETURN or right arrow key.

To add a value to the end of a series, move the cursor beyond the end, type new value, and press RETURN or right arrow key.

The commands take place at the cursor location in the series.

JUMP — Move cursor to end of, beginning of, or date within a series.

INSERT — Add 1 or more data points to the series.

DELETE — Delete data points from the series.

SPECS — Change the data series specifications.

    NAME — Change the series name.

    PER — Change the series period.

    START — Change the series start date.

    EXIT — Return without making change.

FORMAT — Change the data format (fixed format with degree of precision or floating point) and column width.

PRINT — Print the contents of the screen.

UNDO — Remove all changes made in this edit session.

EDIT — Return to the Edit entry level.

FILL — Add data to the series.

    ARITH — Add data in arithmetic progression.

    GEOMET — Add data in geometric progression.

    INSERT — Add a whole series from memory.

    INTERP — Interpolate for zero values between points.

    EXIT — Return without adding data.

EXIT — Return to the Main Storage Management menu and save series.

VISITREND PROGRAM
Main Menu
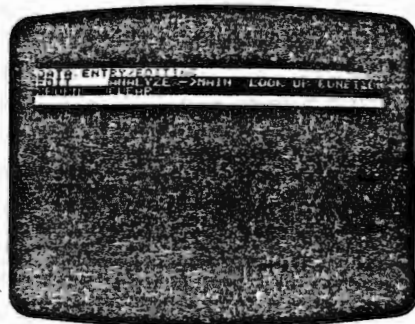
EDIT	Invoke the data entry and editing function.
ANALYZE	Invoke statistical analysis functions.
->MAIN	Return to the Main Storage Management program.
LOOKUP	List data series currently in memory.
FUNCTION	Invoke the series permutation functions.
XFORM	Invoke the series transformation function.
CLEAR	Delete data series from memory.

XFORM Capabilities

The XFORM function offers the following operators and functions:

Arithmetic Operators

+	Addition
–	Subtraction
*	Multiplication
/	Division
.	Exponention

Logical Operators
AND
OR
NOT

Comparative Operators

<	Less than
<=	Less than or equal
=	Equal
>	Greater than
>=	Greater than or equal

Functions

(Variable (v) must be a series name—see Applesoft functions for further information.)

SGN(v)	Sign
INT(v)	Integer part of
SQR(v)	Square root
LOG(v)	Natural logarithm
EXP(v)	e to the power of
RND(v)	Random number between 0 and 1
ABS(v)	Absolute value of
SIN(v)	Sine
COS(v)	Cosine
TAN(v)	Tangent
ATN(v)	Arctangent

Parentheses () can be used anywhere to change the natural order of execution and improve readability.
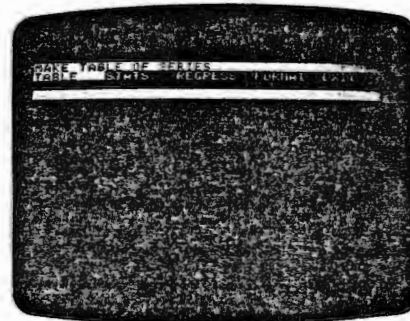
Analyze Menu

TABLE	List one or more series by date.
STATS	Generate descriptive statistics for one or more series.

| UNLABEL | Remove axis labels (takes immediate effect). |
| | |

UNLABEL — Remove axis labels (takes immediate effect).

| BOTH | Remove X- and Y-axis labels. |
HORIZ	Remove X-axis labels.
VERT	Remove Y-axis labels.
NONE	Return to main menu.

RESCALE — Change the program set Y-axis scale (effective next PLOT).

BACKGR — Change the background color – also changes the plotting color; displays color menu (effective next PLOT or OVERLAY).

COLOR — Change the plotting color; displays color menu (effective next PLOT or OVERLAY).

Title Menu
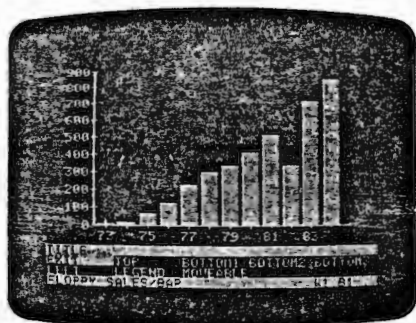
EXIT — Return to Main Plot menu.

TOP — Put title at top of chart (normal or bold typeface).

BOTTOM1 — Put title at bottom of chart (normal or bold typeface).
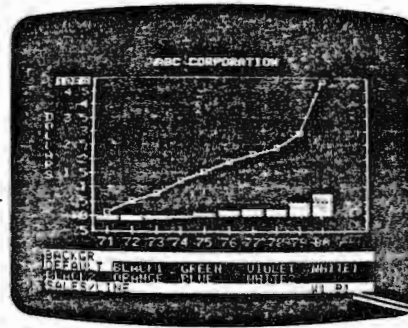
BOTTOM2 — Same as BOTTOM1 but second line.

BOTTOM3 — Same as BOTTOM1 but third line.

LEFT — Put vertical title along Y-axis (normal typeface only).

LEGEND — Return the legend lines covered by bottom titles (removes legend from pie chart).

MOVEABLE — Put title anywhere on chart—use I, J, K, and M keys to move title, 0 through 9 to control speed (normal typeface only).

Color Menu

Color	Code	Black and White Representation
DEFAULT		Black background, white plotting
BLACK1	B1	Black
GREEN	GR	Grey
VIOLET	VI	Grey
WHITE1	W1	White
BLACK2	B2	Black
ORANGE	OR	Grey
BLUE	BL	Grey
WHITE2	W2	White

COLOR CODE
W1.B1

Plotting ——— ——— Background
Color   Color

Main Plot Menu

PLOT	Draw the chart type with the current series.
SELECT	Go to the Select menu.
WINDOW	Display the window menu.

	EXIT	Return to the Main Plot menu.
	HORIZ	Create top and bottom windows.
	VERT	Create left and right windows.
	SWITCH	Switch to the other window.
	NONE	Return to single window mode.

|	
PRINT	Print the currently displayed chart on the graphic printer.
PIXSAVE	Save the currently displayed chart in binary form on diskette for later printing by another program.
OPTIONS	Go to the Options menu.
–>MAIN	Go to the Storage Management program.
OVERLAY	Draw the current series over the currently displayed chart.
NEW	Erase current chart, reset all options to the defaults.

Options Menu
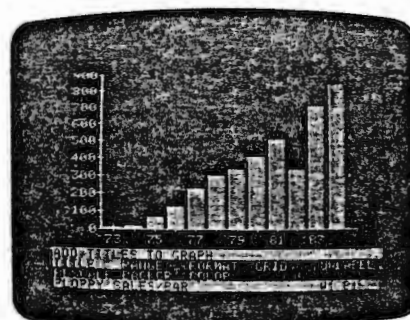
TITLE	Go to the Title menu (takes immediate effect).
RANGE	Change the current range (effective next PLOT).

	SET	Specify a new range.
	CLEAR	Return to program established range.
	EXIT	Return without changing range.

FORMAT	Change the current chart display format (effective PLOT or OVERLAY).
	Line chart—SYMBOLS, LINES, or BOTH.
	Bar chart—OUTLINE, SHADED, or SOLID.
	Scatter chart — SYMBOLS or POINTS.
GRID	Draw grid lines; removes existing grid lines (takes immediate effect).

	BOTH	Draw or remove horizontal and vertical grid lines.
	HORIZ	Draw or remove horizontal grid lines.
	VERT	Draw or remove vertical grid lines.
	NONE	Return to Main menu.

|	
REGRESS	Do linear multiple regression and trendline forecasting; generates fitted and residual series.
FORMAT	Change the data format (fixed format with degree of precision or floating point) and column width.
EXIT	Return to the Main VisiTrend menu.

Function Menu
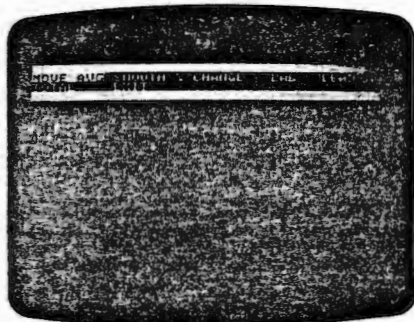
MOVE AVG	Generate a series containing the moving average of the source series.
SMOOTH	Generate a series containing a single exponentially smoothed version of the source series.
%CHANGE	Generate a series containing the percent of change between points in the source series.
LAG	Generate a series containing a lagging version of the source series.
LEAD	Generate a series containing a leading version of the source series.
TOTAL	Generate a series containing the cumulative total of the points in the source series.
EXIT	Return to the Main VisiTrend menu.

PLOT PROGRAM
Select Menu
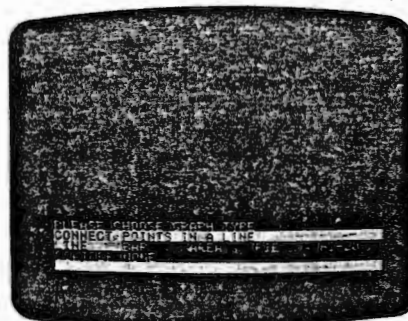
LINE	Draw line chart (select one or more series).
BAR	Draw vertical bar chart (select one or more series; multiple series are stacked).

NORMAL	Full-width bars centered on tick marks.
LEFT	Half-width bars to left of tick marks.
RIGHT	Half-width bars to right of tick marks to draw comparison charts (left and right bars). PLOT first bar and OVERLAY second—change FORMAT or COLOR so bars can be distinguished.

AREA	Draw area chart (select one or more series).
PIE	Draw pie chart of values from same date in different data series (select two or more series).
HI-LO	Draw vertical lines between high and low points at each date (separate prompts for two series).
SCATTER	Draw a scatter chart (separate prompts for two series).
NONE	Go to Main Plot menu.